**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Previously Presented) An open MRI system comprising:
an open MRI magnet system; and
a vibration isolation system adapted to support the MRI magnet system;
wherein the MRI magnet system comprises a clam-shell MRI magnet system.

2. (Original) The open MRI system of claim 1, wherein a spring constant and damping of the vibration isolation system are adjustable.

3. (Original) The open MRI system of claim 1, wherein the vibration isolation system comprises a plurality of pneumatic isolators.

4. (Original) The open MRI system of claim 1, wherein the vibration isolation system comprises a plurality of active vibration control isolators.

5. (Original) The open MRI system of claim 1, further comprising a balance mass.

6. (Original) The open MRI system of claim 5, wherein the balance mass is adjustable.

7. (Original) The open MRI system of claim 1, wherein the vibration isolation system is secured to a floor and the MRI magnet system is attached over the vibration isolation system.

8. (Original) The open MRI system of claim 1, wherein the vibration isolation system is configured within a footprint of the MRI magnet system.

9. (Original) The open MRI system of claim 1, further comprising a structural holder positioned between the vibration isolation system and the MRI magnet system.

10. (Original) The open MRI system of claim 1, wherein the vibration isolation system is retrofitted to a preexisting MRI magnet system.

11. (Original) The open MRI system of claim 10, wherein the vibration isolation system is mounted on posts such that MRI magnet system supports do not contact a floor of a site where the MRI magnet system is located.

12. (Original) The open MRI system of claim 1, wherein the vibration isolation system is site tunable.

13. (Original) The open MRI system of claim 11, wherein the vibration isolation system is tuned to minimize the magnet system Q factor and to control a bandwidth of the MRI magnet system vibration response at a predominant MRI magnet exciting frequencies.

14. (Currently Amended) ~~An~~ The open MRI system of claim 1, further comprising:

(a) a first assembly comprising:

(1) a longitudinally-extending and generally-vertically-aligned first axis;

(2) at least one superconductive main coil positioned around said first axis and carrying a first main electric current in a first direction; and

(3) a first vacuum enclosure enclosing said at least one superconductive main coil of said first assembly;

(b) a second assembly longitudinally spaced apart from and disposed below said first assembly, comprising:

(1) a longitudinally-extending second axis generally coaxially aligned with said first axis;

(2) at least one superconductive main coil positioned around said second axis and carrying a second main electric current in said first direction; and

(3) a second vacuum enclosure enclosing said at least one superconductive main coil of second assembly; and

(c) at least one support beam external to said first and second vacuum enclosures having a first end attached to said first assembly and having a second end attached to said second assembly~~; and~~

~~(d) a vibration isolation system~~.

15. (Original) The open MRI system of claim 14, wherein a spring constant and damping of the vibration isolation system are adjustable.

16. (Original) The open MRI system of claim 14, wherein the vibration isolation system comprises a plurality of pneumatic isolators.

17. (Original) The open MRI system of claim 14, wherein the vibration isolation system comprises a plurality of active vibration control isolators.

18. (Original) The open MRI system of claim 14, further comprising an adjustable balance mass.

19. (Original) The open MRI system of claim 14, wherein the vibration isolation system is secured to a floor and the MRI magnet system is attached over the vibration isolation system.

20. (Original) The open MRI system of claim 14, wherein the vibration isolation system is configured within a footprint of the MRI magnet system.

21. (Original) The open MRI system of claim 14, wherein:

the vibration isolation system is retrofitted to a preexisting MRI magnet system; and

the vibration isolation system is mounted on posts such that MRI magnet system supports do not contact a floor of a site where the MRI magnet system is provided.

22. (Original) The open MRI system of claim 14, wherein the vibration isolation system is site tuned to minimize the magnet system Q factor and to control a bandwidth of the MRI magnet system vibration response at a predominant MRI magnet exciting frequencies.

Claims 23-38 (Cancelled).

39. (Previously Presented) The open MRI system of claim 1, wherein the open clam-shell MRI magnet system comprises a vertically aligned MRI magnet system.

40. (Previously Presented) The open MRI system of claim 39, wherein the vertically-aligned, open clam-shell MRI magnet system comprises:

a first magnet assembly containing a first superconductive coil;

a second magnet assembly containing a second superconductive coil; and

only two support members supporting the second magnet assembly over the first magnet assembly, wherein the two support members are not diametrically aligned to a diameter line of the first and the second magnet assemblies.